1,105,590

PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

Applicator for a Pressurised Container

We, PIGOT & SMITH LIMITED, a British Company of Leigh Street, Wigan, Lancashire, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention concerns an applicator for use in applying, to a receiving surface, a fluent substance dispensed from a pressurised container, such as an aerosol dispensing container, and having a depressable closure or valve member which serves also as an outlet for the container.

Fluent substances in pressurised containers as aforesaid are usually applied to the receiving surface by being sprayed on, depression of the closure or valve member resulting in the substance being delivered as a fine spray or foam which is directed onto the surface. An object of this invention is to provide a simple and convenient arrangement enabling the substance to be applied by brushing or spreading.

With this object in view, the present invention provides an applicator for use in applying, to a receiving surface, a fluent substance dispensed from a pressurised container having a depressable closure or valve which serves also as an outlet for the container, comprising a body which is adapted to be a sliding fit on the container and which carries a connector or socket which engages the closure or valve when the body is on the container, the connector or socket having a passageway for receiving dispensed material from the closure or valve and leading to a distributor, in the form of a spreader.

In order that the invention may be fully understood, it will be described further, by way of example, with reference to the accompanying drawings which illustrate a preferred embodiment of the applicator, and in which:—

Fig. 1 is a perspective view showing the applicator about to be fitted onto a pressurised container; and

Fig. 2 is an enlarged part-sectional side elevation showing the applicator in position, on the container, and a protective cap on the applicator.

The particular embodiment of the applicator shown in the drawings comprises a generally cylindrical body 10 of internal diameter such that it is an axially-sliding fit over the outside of a generally cylindrical pressurised container 11 with which it is to be used. In the illustrated case, the container 11 is an aerosol dispensing container having an axially-directed closure member or valve member 12 which is of tubular form and serves as an outlet for the fluent substances within the container 11. It will be appreciated that such aerosol dispensing containers are usually marketed with a detachable finger piece (not shown) provided on the closure member or valve member 12, such finger piece being shaped for convenient depression thereof to depress the closure member or valve member 12 to release the container's contents, and having a lateral jet through which the contents are dispensed as a spray or foam. In using an aerosol dispensing container in conjunction with the illustrated form of the applicator of the present invention, therefore, the finger piece will be removed and discarded.

The body 10 is open at one end for fitting onto the container 11 as already discussed, and at its other end is blanked off by an end disc 13 formed with an annular reinforcing rib 14 and having an axially-directed tube 15 formed integrally therewith and providing an external part 16 directed away from the body 10 and an internal part 17 within the body 10.

The internal part 17 of the tube 15 constitutes a connector or socket having an internal bore 18 such that the closure member or valve member 12 of the aerosol dispensing container

[*Price 4s. 6d.*]

11 is a snug sliding fit therein. The bore 18 merges, at a shoulder 19, with a smaller diameter passageway 20 through the external part 16 of the tube 15, and the passageway 20 terminates at a mouth 21 of the tube 15 in which mouth 21 a distributor, in the form of a spreader constituted by a brush or bristles 22, is secured.

The axial length of the bore 18 is shorter than the exposed length of the closure member or valve member 12 of the container 11.

A circumferential rib 23 is provided around the body 10 and serves as a stop for a protective cup-like cap 24 which will fit over the body 10 to enclose the protruding external part 16 of the tube 15 and the bristles 22.

When the applicator is required to be used with an aerosol dispensing container, as already described the usual finger piece is removed from the closure member or valve of the aerosol dispensing container so that the appearance of the latter is now as illustrated in the drawings. Thereupon, the applicator can be slid into position as shown in Fig. 2, with the closure member or valve member 12 entering into the bore or socket 18 provided by the internal part of the tube 15, so that the outlet 12 of the aerosol dispensing container 11 is brought into communication with the passage 20 through the tube 15. The cap 24 is now removed, and upon manipulation of the body 10 so as to tend to press it further on to the container 11, the closure member or valve member 12 is relatively depressed in relation to the container 11 to release some of the fluent substance from the container 11. The released material flows along the passage 20 and into the brush 22, and can be applied to a receiving surface by brushing on, additional material from the container being released into the brush 22 as and when necessary. When the desired application has been completed, the applicator can be protected by refitting of the cap 24, if necessary after washing out of the bristles of the brush 22 and also the bore 18 and passage 20.

The device as described is particularly convenient for use in the application of paints or other coating substances (e.g. "touch-up" paints for cars) or for applying antiseptic substances in medical use. Other uses are, of course, possible.

It will be appreciated that the applicator is not necessarily disposable or expendable, and that it can, if desired and appropriate, be employed in turn with a number of containers in the application of different substances or of successive supplies of the same substance.

The invention is not confined to the precise details of the foregoing example and variations may be made thereto. Thus, whilst the applicator has been described in relation to its use with an aerosol dispensing container it can be used with any form of pressurised container having a closure member or valve member which acts also as an outlet of the container and depression of which serves to release the container's contents. Thus, the form of the connector or socket which cooperates with the container's outlet and which in the illustrated case is the internal part 17 of the tube 15 will be such as to be complementary to and to cooperate with the container's outlet and need not necessarily be of the form shown.

In some instances, spreading of the dispensed material may be desired to be effected otherwise than by brushing, for example where adhesives are being dispensed, in which case the passageway of the applicator will be provided with an appropriate spreader in the form of a flexible spade or nib.

The protective cap 24 is, of course, not essential to the invention.

WHAT WE CLAIM IS:—

1. An applicator for use in applying, to a receiving surface, a fluent substance dispensed from a pressurised container having a depressable closure or valve which serves also as an outlet of the container, comprising a body which is adapted to be a sliding fit on the container and which carries a connector or socket which engages the closure or valve when the body is on the container, the connector or socket having a passageway for receiving dispensed material from the closure or valve and leading to a distributor, in the form of a spreader.

2. An applicator as claimed in Claim 1 wherein the body is generally cylindrical for fitting axially over a generally cylindrical pressurised container.

3. An applicator as claimed in Claim 2 wherein the body is closed at one end by an end disc supporting an axially-directed tube having an external part carrying the distributor and an internal part within the body and forming the connector or socket.

4. An applicator as claimed in Claim 3 wherein an annular reinforcing rib is provided on the end disc.

5. An applicator as claimed in Claim 3 or 4 wherein the internal part of the tube has an axial bore which is adapted to be a sliding fit on the closure member or valve member of a pressurised container in the form of an aerosol dispensing container, such bore being of shorter length than the closure member or valve member.

6. An applicator as claimed in any preceding claim wherein the distributor is in the form of a brush.

7. An applicator as claimed in any of Claims 1 to 5 wherein the distributor is in the form of a flexible spade or nib.

8. An applicator as claimed in any preceding claim further including a protective cap which fits over the body and encloses the distributor.

9. An applicator for use in applying, to a receiving surface, a fluent substance dis-

pensed from a pressurised container, substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

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1 SHEET *This drawing is a reproduction of the Original on a reduced scale*

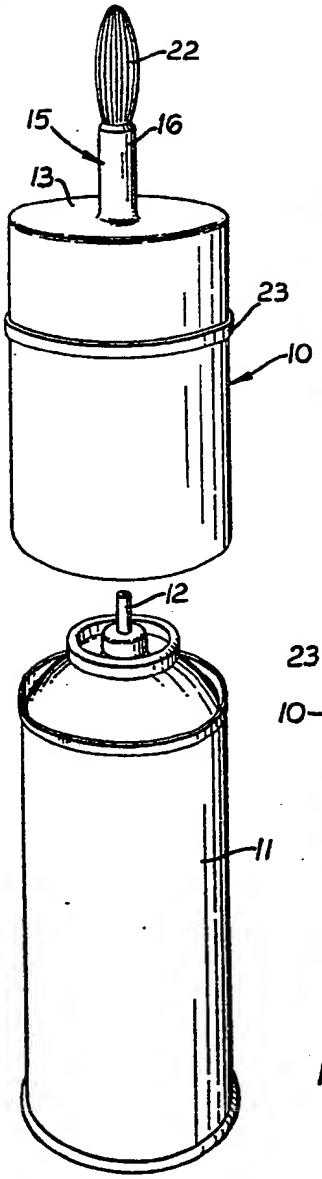

Fig. 1.

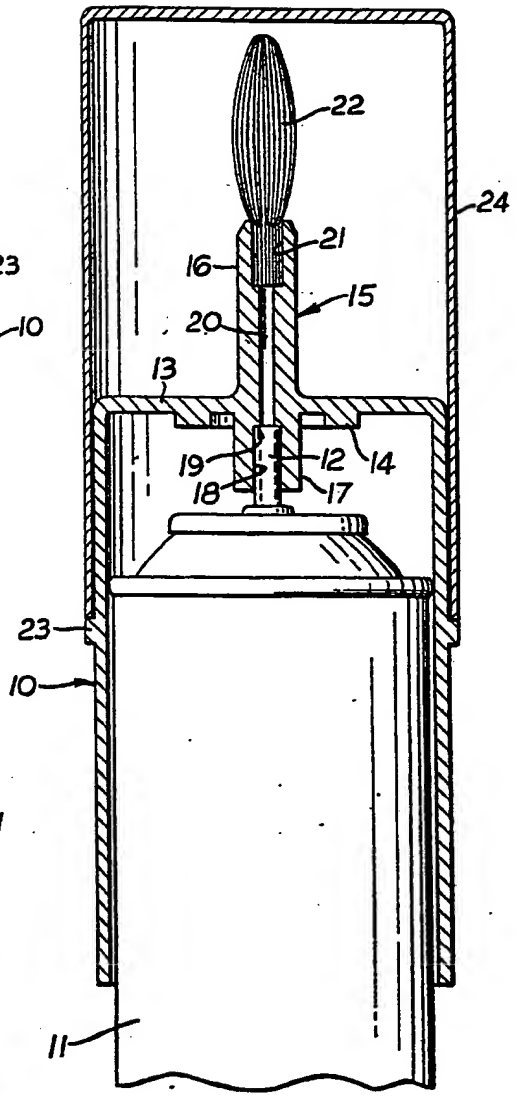

Fig. 2.

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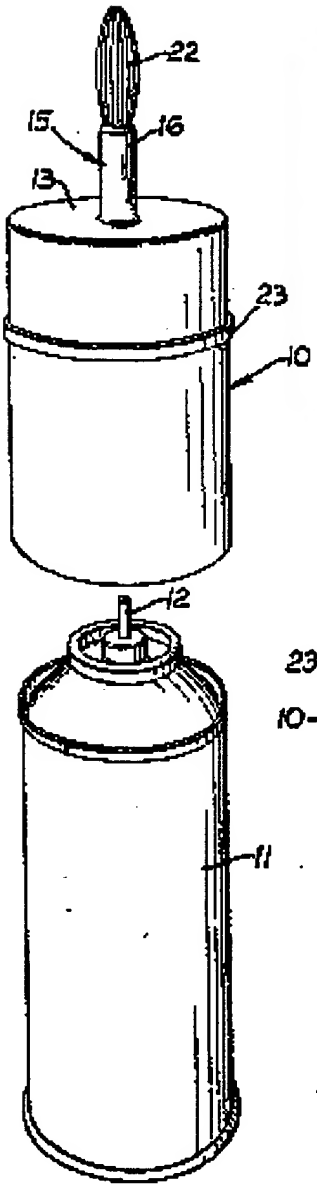

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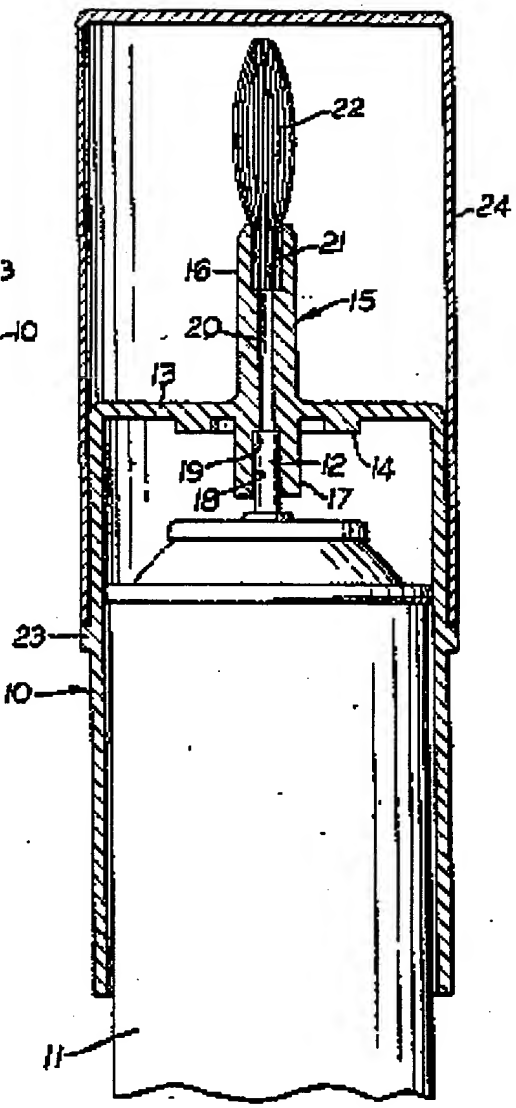

Fig. 2.